# P & A Engineers and Consultants, Inc.

312 Justice Avenue Logan, WV 25601 Phone (304) 752-8320 Fax (304) 752-7488

January 19, 2017



Mr. William Durham
Division of Air Quality
601 57<sup>th</sup> Street
Charleston, WV 25304-2345

Re: Hawkeye Contracting Company Rock Crusher – Multiple Sites Facility ID No. Pending

Dear Mr. Durham:

On behalf of our client, Hawkeye Contracting Company, LLC, P & A Engineers and Consultants, Inc. submits the attached Construction Application for the above-mentioned company. A submittal fee check in the amount of \$1,500 is enclosed, along with additional permit copies.

The purpose of this application is to address the construction and operation of a rock crusher/screening system for multiple surface mine sites. The advertisements will be placed in the Logan Banner, Coal Valley News and Charleston Daily Mail and will be submitted upon receipt.

If additional information or clarification is needed, please contact me at the Logan address listed above or call 304-752-8320.

Sincerely,

Donna J. Toler

Air Quality Project Manager donnatoler@suddenlink.net

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# WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF AIR QUALITY

601 57<sup>TH</sup> Street SE Charleston, WV 25304

Phone: (304) 926-0475 • www.wvdep.org

PLEASE CHECK ALL THAT APPLY (IF KNOWN):

CONSTRUCTION | MODIFICATION | RELOCATION
ADMINISTRATIVE UPDATE | AFTER-THE-FACT

# APPLICATION FOR GENERAL PERMIT REGISTRATION

CONSTRUCT, MODIFY, RELOCATE OR ADMINISTRATIVELY UPDATE A STATIONARY SOURCE OF AIR POLLUTANTS

FOR AGENCY USE ONLY: PLANT I.D. #

PERMIT #	PERMIT WRITER:	

☐ G10-C – Coal Preparation and Handling ☐ G20-B – Hot Mix Asphalt ☐ G30-B – Natural Gas Compressor Stations ☐ G40-B – Nonmetallic Minerals Processing ☐ G50-B – Concrete Batch	9. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY ONLY): PENDING		
SECTION I. GENERA	AL INFORMATIO	DN	
1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF ST	ATE'S OFFICE):	2. FEDERAL EMPLOYER ID NO. (FEIN):	
HAWKEYE CONTRACTING COMPANY	LLC		
		82-0586700	
3. APPLICANT'S MAILING ADDRESS:			
PO BOX	(1200		
ROBINSON CRE	EK, KY 415	60	
5. IF APPLICANT IS A SUBSIDIARY CORPORATION, PLEASE PROVIDE	THE NAME OF F	PARENT CORPORATION:	
6. WV BUSINESS REGISTRATION. IS THE APPLICANT A RESIDENT OF	THE STATE OF	WEST VIRGINIA? YES □ NO	
☐ IF YES, PROVIDE A COPY OF THE CERTIFICATE OF PAGE) INCLUDING ANY NAME CHANGE AMENDME	INCORPORATION OF THE PROPERTY	ON / ORGANIZATION / LIMITED PARTNERSHIP (ONE R BUSINESS CERTIFICATE AS ATTACHMENT A.	
☐ IF NO, PROVIDE A COPY OF THE CERTIFICATE OF A INCLUDING ANY NAME CHANGE AMENDMENTS O	AUTHORITY / AUROTHER BUSIN	JTHORITY OF L.L.C. / REGISTRATION (ONE PAGE) NESS CERTIFICATE AS ATTACHMENT A	

#### SECTION II. FACILITY INFORMATION

7. TYPE OF PLANT OR FACILITY (STATIONAR' CONSTRUCTED,	7. TYPE OF PLANT OR FACILITY (STATIONARY SOURCE) TO BE CONSTRUCTED,		DUSTRIAL CLASSIFICATION (SIC) CODE FOR			
MODIFIED, RELOCATED OR ADMINISTRATIVELY UPDATED (E.G., COAL PREPARATION PLANT, PRIMARY CRUSHER, ETC.):			1221			
Construction and operation of	rock					
crushing/screening plant						
9A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY:	10A. LIST ALL CURRENT ASSOCIATED WITH THIS	45CSR13 AND 45C PROCESS (FOR EX	SR30 (TITLE V) PERMIT NUMBERS KISTING FACILITY ONLY):			
Pending						
PRIMARY OPERATING SITE INFORMATION						
11A. NAME OF PRIMARY OPERATING SITE:	: 12A. MAILING ADDRESS OF PRIMARY OPERATING SITE:					
Guyan Surface Mine	Same					
13A. DOES THE APPLICANT OWN, LEASE, HA'  ▼YES □ NO	VE AN OPTION TO BUY, OF	R OTHERWISE HAVI	E CONTROL OF THE PROPOSED SITE?			
⇒ IF YES, PLEASE EXPLAIN: Lease agre	· · · · · · · · · · · · · · · · · · ·	·				
☐ IF NO, YOU ARE NOT ELIGIBLE FOR A P	ERMIT FOR THIS SOURCE					
I 14A. □ FOR MODIFICATIONS OF ADMINISTRA PRESENT LOCATION OF THE FACIL			PLEASE PROVIDE DIRECTIONS TO THE			
FOR CONSTRUCTION OR RELC LOCATION FROM THE NEAREST ST	,	E PROVIDE DIRECT	TIONS TO THE PROPOSED NEW SITE			
Banda 4400 (a farancia (a fara	W. D 40		alia Zaratta a Taran Inflanta Barra			
Route 119S to Logan, intersect will Creek Road or Dehue Hollow Road, for						
posted signs. Guard will direct to sur	face mine area belong	ing to Guyando	tte Mining			
INCLUDE A MAP AS ATTACHMENT F.						
15A. NEAREST CITY OR TOWN:	16A. COUNTY:					
Amherstdale	Logan					
17A. UTM NORTHING (KM):	18A. UTM EASTING (KM):		19A. UTM ZONE:			
4182.52098	427.25499 17					

#### 1<sup>ST</sup> ALTERNATE OPERATING SITE INFORMATION

11B. NAME OF PRIMARY OPERATING SITE:	12B. MAILING ADDRESS OF PRIMARY OPERATING SITE:						
HUFF CREEK SURFACE MINE							
13B. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE <i>PROPOSED SITE</i> ?  ■ YES □ NO							
□ IF YES, PLEASE EXPLAIN: LEASE AGRE	EEMENT WITH BLACKHAWK MINING						
⇔ IF NO, YOU ARE NOT ELIGIBLE FOR A PI	ERMIT FOR THIS SOURCE.						
14B.   → FOR MODIFICATIONS or ADMINISTRA  PRESENT LOCATION OF THE FACIL	ATIVE UPDATES, AT AN EXISTING FACILITY, P LITY FROM THE NEAREST STATE ROAD;	LEASE PROVIDE DIRECTIONS TO THE					
FOR CONSTRUCTION OR RELC LOCATION FROM THE NEAREST ST	OCATION PERMITS, PLEASE PROVIDE DIRECT ATE ROAD.	IONS TO THE PROPOSED NEW SITE					
From Charleston, follow US119S to Re		ast Van toward Bald Knob, proceed					
approximately 6.5 miles, entrance to s	surface mine on right						
INCLUDE A MAP AS ATTACHMENT F.							
15B. NEAREST CITY OR TOWN:	16B. COUNTY:						
Wharton BOONE							
17B. UTM NORTHING (KM):	17B. UTM NORTHING (KM): 18B. UTM EASTING (KM): 19B. UTM ZONE:						
4184.29172	446.45039 17						

## 2<sup>ND</sup> ALTERNATE OPERATING SITE INFORMATION

11C. NAME OF PRIMARY OPERATING SITE: PANTHER CREEK SURFACE MINE	12C. MAILING ADDRESS OF PRIMARY OPERATING SITE:						
13C. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE PROPOSED SITE?							
YES DO							
	GREEMENT WITH BLACKHAWK	AINUNIC .					
17 IF 1ES, PLEASE EXPLAIN. ELASE A	GREEWENT WITH BEACKHAWK II	MINING					
☐⇒ IF NO, YOU ARE NOT ELIGIBLE FOR A PI	ERMIT FOR THIS SOURCE.						
14C.   → FOR MODIFICATIONS or ADMINISTRA  PRESENT LOCATION OF THE FACIL	ATIVE UPDATES, AT AN EXISTING FACILITY, F	LEASE PROVIDE DIRECTIONS TO THE					
	CATION PERMITS, PLEASE PROVIDE DIRECT	TIONS TO THE PROPOSED NEW SITE					
LOCATION FROM THE NEAREST ST							
Follow I-77 to Sharon, tale Sharon guardshack located approximately INCLUDE A MAP AS ATTACHMENT F.	•						
15C. NEAREST CITY OR TOWN:	16C. COUNTY:						
Eskdale							
Londaio	KANAWHA						
17C. UTM NORTHING (KM):	18C. UTM EASTING (KM):	19C. UTM ZONE:					
4212.51308	(,						
	457.54025	17					
20. PROVIDE THE DATE OF ANTICIPATED INSTALLATION OR CHANGE: March 1, 2017  □ IF THIS IS AN AFTER-THE-FACT PERMIT APPLICATION, PROVIDE  21. DATE OF ANTICIPATED START- UP IF REGISTRATION IS GRANTED:							
THE DATE UPON WHICH THE PROPOSED CHANGE DID HAPPEN:/							
22 PROVIDE MAXIMUM PROJECTED OPERATI							
22. PROVIDE MAXIMUM PROJECTED <b>OPERATING SCHEDULE</b> OF ACTIVITY/ ACTIVITIES OUTLINED IN THIS APPLICATION:							
HOURS PER DAY 8 DAYS PER WEEK _	5 WEEKS PER YEAR 50 PERCENTAG	E OF OPERATION <u>100%</u>					

# WEST VIRGINIA STATE TAX DEPARTMENT BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
HAWKEYE CONTRACTING COMPANY LLC
4189 COLLINS HWY
PIKEVILLE, KY 41501-6833

**BUSINESS REGISTRATION ACCOUNT NUMBER:** 

1052-0030

This certificate is issued on:

09/16/2016

This certificate is issued by the West Virginia State Tax Commissioner in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued. This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atL006 v.4 L2084450112

#### PROCESS DESCRIPTION

Rock from adjacent overburden areas will be transferred to BS-01(PW) by front end loader @ TP-01(UD-PW); go to belt conveyor BC-01(NC) @ TP-02(TC-PE); and transfer to screen SS-01(PW) @ TP-03(TC-PW). The screen will discharge material by size to two separate stockpiles OS-01(SW-WS) and OS-02(SW-WS) via belt conveyors BC-02(NC) and BC-03(NC) @ TP-04(TC-FE) thru TP-08(TC-MDH). The screen will transfer to belt conveyor BC-04(NC) @ TP-10(TC-FE) and feed bin BS-02(PW) @ TP-11(TC-PW). From BS-02, material will transfer to BC-05(NC) @ TP-12(TC-PE) to the crusher CR-01(FE) @ TP-13(TC-FE). The material will be crushed and discharged to stockpiles OS-03(SW-WS), OS-04(SW-WS), OS-05(SW-WS) according to size via belt conveyors BC-06(NC), BC-07(NC), and BC-08(NC) @ TP-14(TC-FE) thru TP-21(LO-MDH). Material will be loaded to truck for distribution on mine site at TP-06(LO-MDH), TP-09(LO-MDH), TP-16(LO-MDH), TP-18(LO-MDH), and TP-22(LO-MDH).

Company officials have agreed to install a portable water spray system to control fugitive emissions.

AP-42 emission calculations are to be used for the basis of permit requirements due to lack of EPA data for test results.

#### **DESCRIPTION OF FUGITIVE EMISSIONS**

Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on unpaved haulroads and work areas. The haulroads and work areas will be controlled by water truck in accordance with section E.6.c.i. of the General Permit. The stockpile areas will be controlled by water truck with pressurized pumps sufficient to control emissions. The water truck will be operated three times daily, and more as needed in dry periods.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present. New course rock base material will be added to unpaved haulroads as needed.

GoogleEarth\_Placemark 37° - 47' - 13.75" . Вессо Amherstdale © 2016 Google

# **Hawkeye Mining Company**

P.O. Box 1200 Robinson Creek, KY 41560

Rock Grusher

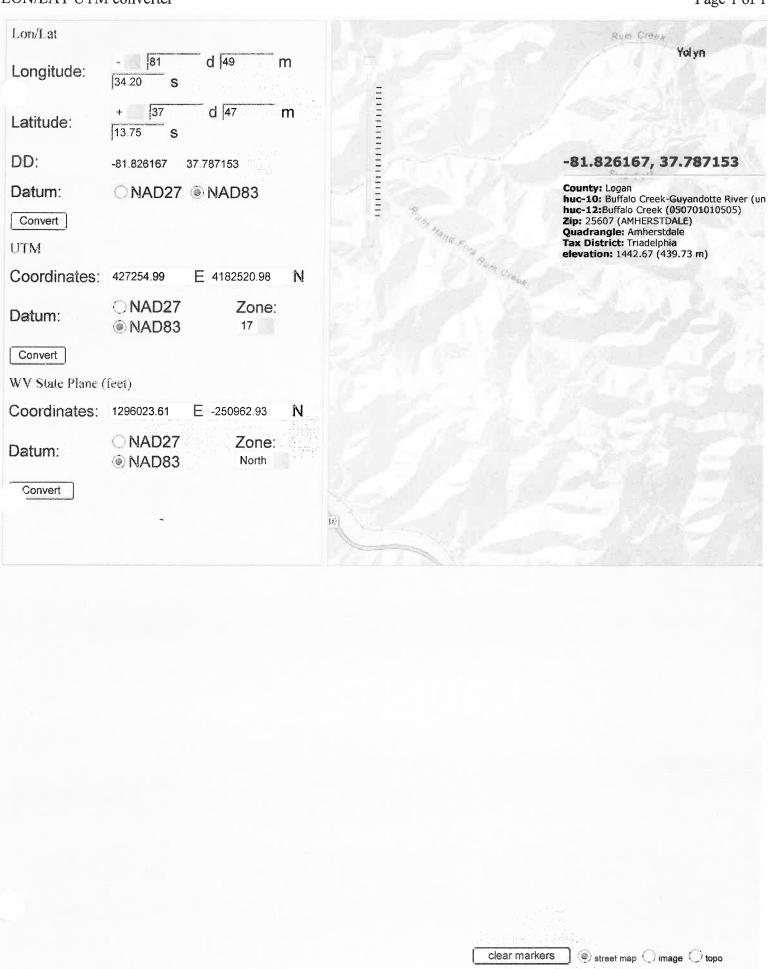
Facility ID Number Pending
Division of Air Quality
Location Map

Propaged by:



ENGINEERS & CONSULTANTS PO Box 470 Alum Creek, WY 25003 (304) 756-4086

17013 01/16/17





# **Hawkeye Mining Company**

P.O. Box 1200 Robinson Creek, KY 41560

**Rock Crusher** 

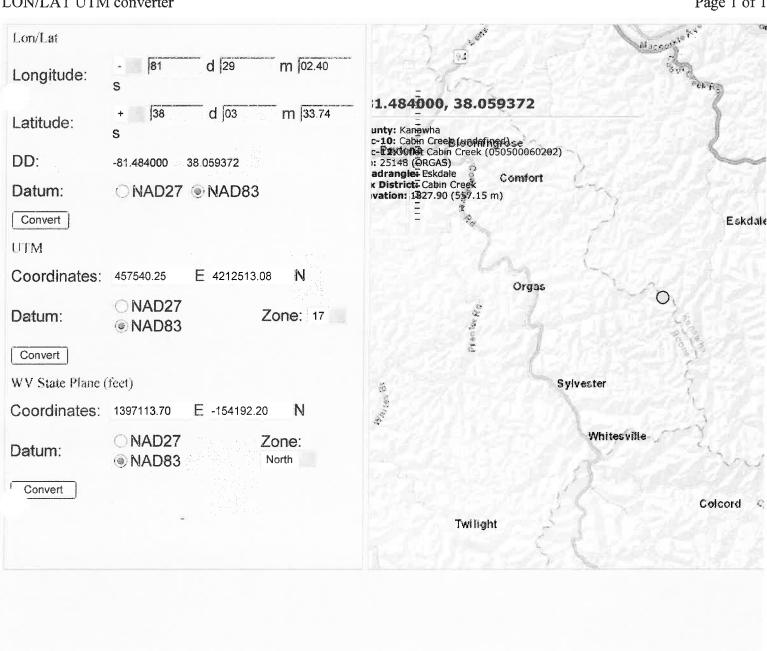
Facility ID Number Pending
Division of Air Quality
Location Map

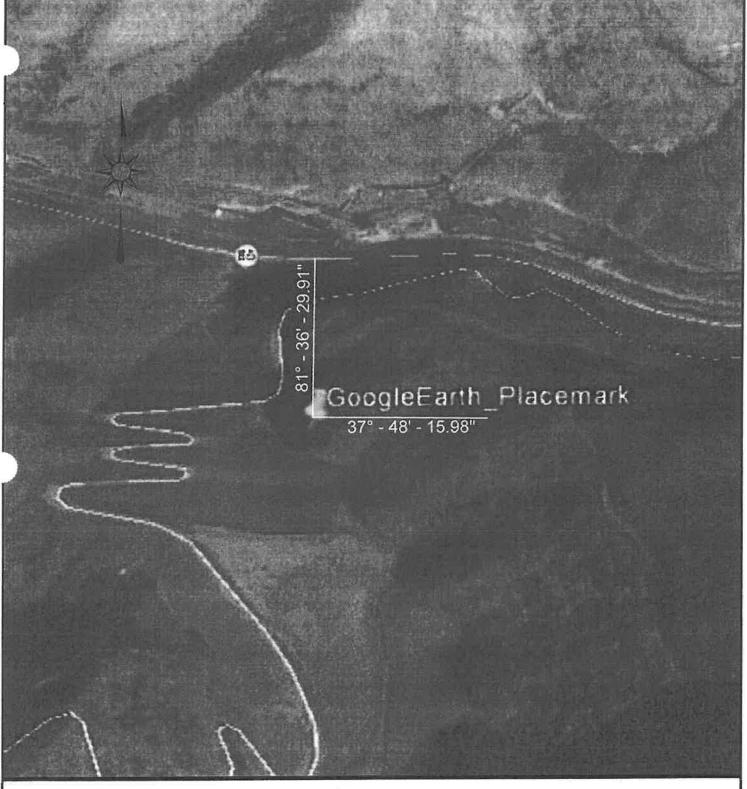
Prepared by



ENGINEERS & CONSULTANTS PO Box 470 Alum Creek, WY 25003 (304) 756-4086

17014 01/16/17





# **Hawkeye Mining Company**

P.O. Box 1200 Robinson Creek, KY 41560

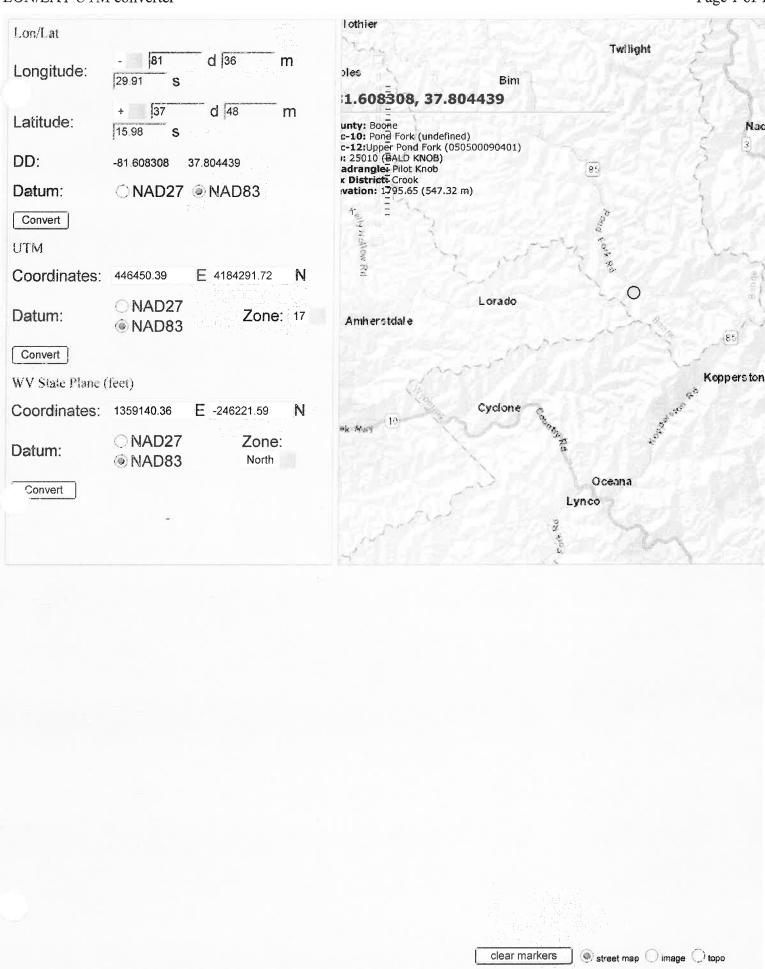
Rock Crusher

Facility ID Number Pending
Division of Air Quality
Location Map

Prepared by



17015 01/16/17



#### **CRUSHING AND SCREENING AFFECTED SOURCE SHEET**

Source Iden	tification Number <sup>1</sup>	SS-01			
Type of Cr	usher or Screen <sup>2</sup>	DD			
Date of	Manufacture <sup>3</sup>	2015			
Maximum	tons/hour	400			
Throughput <sup>4</sup>	tons/year	800,000			
Material	sized from/to: <sup>5</sup>	4 x 0			
Average Moi	sture Content (%) <sup>6</sup>	3			
Control De	vice ID Number <sup>7</sup>	PW			
	height (ft)	N/A			
	diameter (ft)				
	volume (ACFM)				
Baghouse Stack	exit temp (°F)				
Parameters <sup>8</sup>	UTM Coordinates				
	hours/day	8			
Maximum Operating	days/year	250			
Operating Schedule <sup>9</sup>	hours/year	2000			
	January-March	25			
	April-June	25			
Percentage of	July-September	25			
Operation <sup>10</sup>	Oct-December	25			

- 1. Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.
- 2. Describe types of crushers and screens using the following codes:

DR BM	Hammermill Double Roll Crusher Ball Mill Rotary Breaker	SD DD	Stationary Screen Single Deck Screen Double-Deck Screen Triple Deck Screen
JC	Jaw Crusher	ОТ	Other

- GC Gyratory Crusher OT Other - Quadroll
- 3. Enter the date that each crusher and screen was manufactured.
- 4. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
- Describe the nominal material size reduction (e.g. +2"/ -\_").
- 6. Enter the average percent moisture content of the material processed.
- Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A Control Device
   Listing and Control Device Identification Number Instructions in the Reference Document for Control Device ID prefixes and numbering.
- 8. Enter the appropriate stack parameters if a baghouse control device is used.
- 9. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.
- 10. Enter the estimated percentage of operation throughout the year for each crusher and screen.

#### CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Ider	itification Number <sup>1</sup>	CR-01		,	
Type of Cr	usher or Screen <sup>2</sup>	Jaw			
Date of	Manufacture <sup>3</sup>	2015			
Maximum	tons/hour	400			
Throughput⁴	tons/year	800,000			
Material	sized from/to: <sup>5</sup>	6 x 0			
Average Moi	sture Content (%) <sup>6</sup>	3			
Control De	vice ID Number <sup>7</sup>	FW			
	height (ft)	N/A			
	diameter (ft)				
	volume (ACFM)				
Baghouse Stack	exit temp (°F)				
Parameters <sup>8</sup>	UTM Coordinates				
	hours/day	8			
Maximum Operating	days/year	250			
Operating Schedule <sup>9</sup>	hours/year	2000			
	January-March	25			
	April-June	25			
Percentage of	July-September	25			
Operation <sup>10</sup>	Oct-December	25			

- Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation
  which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker
  or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.
- 2. Describe types of crushers and screens using the following codes:

DR BM RB	Hammermill Double Roll Crusher Ball Mill Rotary Breaker Jaw Crusher	SD DD	Stationary Screen Single Deck Screen Double-Deck Screen Triple Deck Screen Other
JC	Jaw Crusher	OT	Other
GC	Gyratory Crusher		

- 3. Enter the date that each crusher and screen was manufactured.
- 4. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.

Describe the nominal material size reduction (e.g. +2"/ -\_").

Other - Quadroii

- 6. Enter the average percent moisture content of the material processed.
- Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A Control Device
   Listing and Control Device Identification Number Instructions in the Reference Document for Control Device ID prefixes and numbering.
- 3. Enter the appropriate stack parameters if a baghouse control device is used.
- 9. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.
- Enter the estimated percentage of operation throughout the year for each crusher and screen.

# **CONVEYING AFFECTED SOURCE SHEET**

		Type of	Size of		m Material er Rate <sup>5</sup>	Average Moisture	Control
Source ID Number <sup>1</sup>	Date of Manufacture <sup>2</sup>	Material Handled <sup>3</sup>	Material Handled <sup>4</sup>	tons/hour	tons/year	Content (%) <sup>6</sup>	Device 7
BC-01	2015	Rock	6x0	400	800,000	3	NC
BC-02	2015	Rock	3x0	400	800,000	3	NC
BC-03	2015	Rock	2x0	400	800,000	3	NC
BC-04	2015	Rock	4x0	400	800,000	3	NC
BC-05	2015	Rock	4x0	400	800,000	3	NC
BC-06	2015	Rock	2x0	400	800,000	3	NC
BC-07	2015	Rock	1x0	400	800,000	3	NC
BC-08	2015	Rock	-1x0	400	800,000	3	NC

Page	of
raye	

#### STORAGE ACTIVITY AFFECTED SOURCE SHEET

	T	1	1	T	
Source Identification Number <sup>1</sup>	BS-01	BS-02			
Type of Material Stored <sup>2</sup>	Rock	Rock			
Average Moisture Content (%) <sup>3</sup>	3	3			
Maximum Yearly Storage Throughput (tons) <sup>4</sup>	800,000	800,000			
Maximum Storage Capacity (tons)⁵	10	10			
Maximum Base Area (ft²) <sup>6</sup>					
Maximum Pile Height (ft) <sup>7</sup>					
Method of Material Load-in <sup>8</sup>	Endloader	Endloader			
Load-in Control Device Identification Number <sup>9</sup>	UD-PW	UD-PW			
Storage Control Device Identification Number <sup>9</sup>	PW	PW			į
Method of Material Load-out <sup>8</sup>	SS	SS			
Load-out Control Device Identification Number <sup>9</sup>	TC-PE	TC-PE			

Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.

Bin or Storage Silo (full enclosure) BS

Enclosure (three sided enclosure)

os Open Stockpile SB Storage Building (full enclosure)

SF Stockpiles with wind fences

OT Other

- Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).
- Enter the average percent moisture content of the stored material.
- Enter the maximum yearly storage throughput for each storage activity. 4.
- Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
- 6. For stockpiles, enter the maximum stockpile base area.
- 7. For stockpiles, enter the maximum stockpile height.
- Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:

CS Clamshell

Stationary Conveyor/Stacker Stacking Tube

Fixed Height Chute from Bins FC

ST

FΕ Front Endloader TC Telescoping Chute from Bins

Mobile Conveyor/Stacker MC

TD Truck Dump

Under-pile or Under-Bin Reclaim Conveyor UC

Pneumatic Conveyor/Stacker PC

Rake or Bucket Reclaim Conveyor

Other

#### STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>	OS-01	OS-02	OS-03	OS-04	OS-05
Type of Material Stored <sup>2</sup>	Rock	Rock	Rock	Rock	Rock
Average Moisture Content (%) <sup>3</sup>	3	3	3	3	3
Maximum Yearly Storage Throughput (tons) <sup>4</sup>	800,000	800,000	800,000	800,000	800,000
Maximum Storage Capacity (tons) <sup>5</sup>	5,000	5,000	5,000	5,000	5,000
Maximum Base Area (ft²) <sup>6</sup>	8,869	8,869	8,869	8,869	8,869
Maximum Pile Height (ft) <sup>7</sup>	20	20	20	20	20
Method of Material Load-in <sup>8</sup>	ss	SS	SS	SS	SS
Load-in Control Device Identification Number9	TC-MDH	TC-MDH	TC-MDH	TC-MDH	TC-MDH
Storage Control Device Identification Number9	SW-WS	SW-WS	SW-WS	SW-WS	sw-ws
Method of Material Load-out <sup>8</sup>	Loader	Loader	Loader	Loader	Loader
Load-out Control Device Identification Number <sup>9</sup>	LO-MDH	LO-MDH	LO-MDH	LO-MDH	LO-MDH

Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.

BS Bin or Storage Silo (full enclosure)

Enclosure (three sided enclosure)

OS Open Stockpile

SB Storage Building (full enclosure)

SF Stockpiles with wind fences

OT Other

- 2. Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).
- 3. Enter the average percent moisture content of the stored material.
- 4. Enter the maximum yearly storage throughput for each storage activity.
- 5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
- 6. For stockpiles, enter the maximum stockpile base area.
- For stockpiles, enter the maximum stockpile height.
- 8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:

CS Clamshell

SS Stationary Conveyor/Stacker

FC Fixed Height Chute from Bins

ST Stacking Tube

FE Front Endloader

TC Telescoping Chute from Bins

MC Mobile Conveyor/Stacker

TD Truck Dump
PC Pneumatic Conveyor/Stacker

UC Under-pilé or Únder-Bin Reclaim Conveyor RC Rake or Bucket Reclaim Conveyor

OT Other

# ATTACHMENT H

# BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET Not applicable for this facility

Complete a Baghouse Air Pollution Control Device Sheet for each baghouse control device.

1.	Baghouse Control Device Identification Number:
2.	Manufacturer's name and model identification:
3.	Number of compartments in baghouse:
4.	Number of compartments online during normal operation and conditions:
5.	Gas flow rate into baghouse: ACFM @ °F and PSIA
6.	Total cloth area: ft <sup>2</sup>
7.	Operating air to cloth ratio: ft/min
8.	Filter media type:
9.	Stabilized static pressure drop across baghouse: inches H <sub>2</sub> O
10.	Baghouse operation is:  □ Continuous □ Automatic □ Intermittent
11.	Method used to clean bags:
	□ Shaker □ Pulse jet □ Reverse jet □ Other
12.	Emission rate of particulate matter entering and exiting baghouse at maximum design operating conditions:
	Entering baghouse: lb/hr and grains/ACF
	Exiting baghouse: lb/hr and grains/ACF
13.	Guaranteed minimum baghouse collection efficiency: %
14.	Provide a written description of the capture system (e.g. hooding and ductwork arrangement), size of ductwork and hoods and air volume, capacity and operating horsepower of fan:

15. Describe the method of disposal for the collected material:



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Call us at 1-713-434-2300

Contact Us

# Diesel Fuel Consumption Chart

Caterpillar	Serial	number
Prefix		

Diesel Fuel Consumption Chart

Electrical Formulas

Financing Options

Frequently Asked Power Questions

Hurricane Center

Manufacturer Profiles

Frequently Asked Bi-Fuel juestions

Power Calculator

**Featured Products** 



Caterpillar 3516 DITA Generator

**Quick Links** 

Hurricane Center
Industries
Manufacturer Profiles
Power Calculator
Services

Approximate	Diesel	Fuel	Consumption	Chart
-------------	--------	------	-------------	-------

This chart approximates the fuel consumption of a diesel generator based on the size of the generator and the load at which the generator is operating at. Please note that this table is intended to be used as an estimate of how much fuel a generator uses during operation and is not an exact representation due to various factors that can increase or decrease the amount of fuel consumed.

#### Download the Diesel Fuel Consumption Chart as a PDF

Generator Size (k\%)	1/4 Load (gal/hr)	1/2 Load (gal/hr)	3/4 Load (galiar)	Full Load (gal/hr)
20	0.6	0.9	1.3	1.8
30	1.3	1.8	2.4	2.9
40	1.6	2.3	3.2	4.0
60	1.8	2.9	3.8	4.8
75	2.4	3.4	4.6	5.1
100	2.6	4.1	5.8	7.4
125	3.1	5.0	7.1	9.1
135	3.3	5.4	7.8	9.8
150	3.6	5.9	8.4	10.9
175	4.1	6.8	9.7	12.7
200	4.7	7.7	11.0	14.4
230	5.3	8.8	12.5	18.6
250	5.7	9.5	13.6	18.0
300	6.8	11.3	16.1	21.5
350	7.9	13.1	18.7	25.1
400	8.9	14.9	21.3	28.6
500	11.0	18.5	26.4	35.7
600	13.2	22.0	31.5	42.8
750	16.3	27.4	39.3	<b>53.</b> 4
1000	21.6	36.4	52.1	71.1
1230	26.9	45.3	65.0	88.8
1500	32.2	54.3	77.8	106.5
1750	37.5	63.2	90.7	124.2
2000	42.8	72.2	103.5	141.9
2250	48.1	81.1	116.4	159.6

**Generators** 

**Engines** 

About Us

Manufacturer

# HAWKEYE CONTRACTING ROCK CRUSHING PLANT

## **TERIA POLLUTANTS**

# ID No. Pending Powerscreen XA400S CAT 4.4 Engine

AP-42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-1 for Diesel Fuel

Caterpillar C4.4 Diesel Fuel Engine

Max. Hours of Operation (8 hrs/day, 5 days/week, 50 weeks/year)

Heating Value for diesel

83 kW

hp

hrs/year

111 hp

Btu/gal

E (hourly) = Emission Factor (lb/hp-hr) \* Horse Power (hp)

E (annual) = Emission Factor (lb/hp-hr) \* Horse Power (hp) \* Maximum Hours of Operation \* 1 ton

per 2000 lb

		Emission Factor	Emission Factor			
<b>Pollutant</b>		(lb/hp-hr)	(lb/MMBtu)	Rating	lb/hour	<b>TPY</b>
NOx	AP42	0.03100	4.41	D	3.4410	3.441
CO	AP42	0.00668	0.95	D	0.7415	0.741
SOx	AP42	0.00205	0.29	D	0.2276	0.228
PM/PM10	AP42	0.00220	0.31	D	0.2442	0.244
VOC	AP42	0.00247	0.35	D	0.2742	0.274

## **HAZARDOUS AIR POLLUTANTS**

42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-2 45CSR30 Table 45-30A Hazardous Air Pollutants

Caterpillar C9 Diesel Fuel Engine 111 hp aximum Hours of Operation (8 hrs/day, 6 days/week, 40 weeks/year) 2000 hours/year cation, based on EPA WebFIRE/AP-42 3.4-1 assumptions on diesel 19300 Btu/lb 7.1 lb/gal Heating Value for diesel 134900 BTU/US gal Maximum diesel usage at 2200 rpm 7.4 gal/hour

based on 83 KW fuel consumption

E (hourly) = Emission Factor (lb/hp-hr) \* Horse Power (hp)

E (annual) = Emission Factor (lb/hp-hr) \* Horse Power (hp) \* Maximum Hours of Operation \* 1 ton per 2000 lb

**Emission Factor** CAS NO. (lb/MMBtu) Rating lb/hour **TPY** 71-43-2 Benzene 0.000933 E 0.00093 0.000931 108-88-3 Toluene Ε 0.000409 0.00041 0.000408 **Xylenes** Е 0.000285 0.00028 0.000285 1,3-Butadiene 0.0000391 Ε 3.9E-05 3.9E-05 50-00-0 Formaldehyde E 0.00118 0.00118 0.001178 Acetaldehyde 0.000767 Ε 0.00077 0.000766 Acrolein Ē 0.0000925 9.2E-05 9.23E-05 Naphthalene 91-20-3 0.0000848 Ε 8.5E-05 8.47E-05

Burning diesel fuel:

Total HAPs 0.00378 0.003784

lb/hour TPY

A Tertiary Description Processing Capacity Crusher ID Number Secondary Crusher ID Number 10 Numb	JTS e all information for ea	ach emission source and		Namo of o	nalicant	والمراجا ا	ouo Contractio
### Processing Capacity   Description   Desc						- Hawk	eye Contractir
AL PRIMARY CRUSHING    Primary	or point as noted in the	реник аррисании.		Manue or h	iani.		ock Crusner
Primary   Crusher   Description   Maximum Material   Processing Capacity   Device   Efficiency   ID Number   Processing Capacity   Device   Efficiency   Efficiency   ID Number   Processing Capacity   Device   Efficiency   ID Number   Processing Capacit	I ISHING AND SCRE	FAIIAIC (including all primary or	nd accordant or	uahara and		30,1177	
Primary Crusher   Description   Maximum Material Processing Capacity   Device   Efficiency   Efficiency   From the processing Capacity   Processing Capaci			u seconaary ch	usners and s	screensj		
ID Number   TPH   TPY   ID Number   %	Primary	SHING	Maximu	ım Material	Control	Control	1
The secondary and terriary description  Tousier ID  The secondary and terriary description  The secondary and terriary description and terriary de	li 📗	Description				1 1	
The secondary and terriary crushing    Secondary & Terriary   Description   Maximum Material   Control   Device   Efficiency   Efficiency   Maximum Material   Control   Device   Maximum Material   Control   Device   Efficiency   Maximum Material   Control   Maximum Material   Control   Maximum Material   Control   Device   Efficiency   Control   Control	CR-01	CRUSHER	400	800,000	T FE	80	
Secondary & Tertiary Crusher ID  Description  Description  Description  Description  TPH  TPY  Description  Device Efficiency %  ID Number %   **A  **A  **A  **A  **A  **A  **A		0.10011211					
Secondary & Tertiary Crusher ID  Description  Description  TPH TPY ID Number  ### Additional Processing Capacity  ### Additional Processing Capacity  ### Additional Processing Capacity Crusher ID    Maximum Material Processing Capacity   Device   Efficiency   Device   Efficiency   ID Number   %    Maximum Material Processing Capacity   Device   Efficiency   ID Number   %    ID Number   %    Maximum Material Processing Capacity   Device   Efficiency   ID Number   %    ID Number   %				-	+		
Secondary & Tertiary Description  TPH TPY ID Number  1c. SCREENING  Secondary & Tertiary Description  Toucher ID							
8 Tertiary Crusher ID  Processing Capacity Device ID Number  Processing Capacity Device ID Number  ### TPY I		AND TERTIARY CRUSHING					ı
Crusher ID  TPH TPY ID Number %  TPH TPY TD Number %		December					
1c. SCREENING  Secondary & Tertiary Description Maximum Material Processing Capacity Device Efficiency ID Number %		Description			_8		
Secondary & Tertiary Crusher ID  Maximum Material Processing Capacity TPH TPY ID Number %				·			
Secondary Maximum Material Control Control & Tertiary Description Processing Capacity Device Efficiency TPH TPY ID Number %				I			
Secondary Maximum Material Control Control & Tertiary Description Processing Capacity Device Efficiency TPH TPY ID Number %							
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Secondary Maximum Material Control Control & Tertiary Description Processing Capacity Device Efficiency TPH TPY ID Number %							
Secondary Maximum Material Control Control & Tertiary Description Processing Capacity Device Efficiency TPH TPY ID Number %							
Secondary & Tertiary Crusher ID  Maximum Material Processing Capacity TPH TPY ID Number %				<del></del>			
Secondary & Tertiary  Crusher ID  Maximum Material Processing Capacity  Device Ffficiency TPH TPY ID Number %							
Secondary & Tertiary  Description  Description  Description  Maximum Material Processing Capacity  Device Efficiency TPH TPY ID Number %							
Secondary & Tertiary Crusher ID  Maximum Material Processing Capacity TPH TPY ID Number %							
& Tertiary Description Processing Capacity Device Efficiency  Crusher ID TPH TPY ID Number %	1c. SCREENING						
Crusher ID TPH TPY ID Number %	1 1		Maximur	n Material		Control	
		Description				- 11	
SS-01 Power Screen 400 800,000 PW 80	Crusher ID		TPH	TPY	ID Number	%	
	SS-01	Power Screen	400	800,000	PW	80	
	`						

Page 1

2. TRANSFER POINTS (including all conveyor transfer points, equipment transfer points etc.)

PM PM-10

Destide Size Multinlier (dimensionless)

0.0029

0.0014 Particle Size Multiplier (dimensionless) Mean Wind Speed (mph)

Transfer	Transfer Point Description	Material	T	Maximum	Control	Control
Point	Include ID Numbers of all conveyors,	Moisture	1	ansfer Rate	Device	Efficience
ID No.	crushers, screens, stockpiles, etc. involved	Content %	TPH	TPY	ID Number	
TD 01	10					
TP-01 TP-02	Overburden Area to BS-01 BS-01 to BC-01	3	400	800,000	UD-MDF	
TP-03		3	400	800,000	TC-PE	50
TP-04	BC-01 to SS-01	3	400	800,000	TC-PW	80
TP-05	SS-01 to BC-02	3	400	800,000	TC-FE	80
TP-05	BC-02 to OS-01	3	400	800,000	TC-MDH	0
TP-06	OS-01 to Truck	3	400	800,000	LO-MDH	0
TP-08	SS-01 to BC-03	3	400	800,000	TC-FE	80
TP-08	BC-03 to OS-02 OS-02 to Truck	3	400	800,000	TC-MDH	0
TP-10		3	400	800,000	LO-MDH	0
	SS-01 to BC-04	3	400	800,000	TC-FE	80
TP-11	BC-04 to BS-02	3	400	800,000	TC-PW	80
TP-12	BS-02 to BC-05	3	400	800,000	TC-PE	50
TP-13	BC-05 to CR-01	3	400	800,000	TC-FE	80
TP-14	CR-01 to BC-06	3	400	800,000	TC-FE	80
TP-15	BC-06 to OS-03	3	400	800,000	TC-MDH	0
TP-16	OS-03 to Truck	3	400	800,000	LO-MDH	0
TP-17	CR-01 to BC-07	3	400	800,000	TC-FE	80
TP-18	BC-07 to OS-04	3	400	800,000	TC-MDH	0
TP-19	OS-04 to Truck	3	400	800,000	LO-MDH	0
TP-20	CR-01 to BC-08	3	400	800,000	TC-FE	80
TP-21	BC-08 to OS-05	3	400	800,000	TC-MDH	0
TP-22	OS-05 to Truck	3	400	800,000	LO-MDH	0
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			<u> </u>	l		

#### 3. WIND EROSION OF STOCKPILES (including all stockpiles of raw coal, clean coal, coal refuse, etc.)

p =	number of days per year with precipitation >0.01 inch	157
f =	percentage of time that the unobstructed wind speed	20
1	exceeds 12 mph at the mean pile height	

Source	Stockpile	Silt	Stockpile	Control	Control
ID No.	Description	Content of	base area	Device	Efficiency
		Material %	Max. sqft	ID Number	%
	1" stone	10	8,869	SW-WS	75
II	2" Stone	10	8,869	SW-WS	75
OS-03	1" stone	10	8,869	SW-WS	75
OS-04	2" Stone	10	8,869	SW-WS	75
OS-05	3" stone	10	8,869	SW-WS	75

# 4. UNPAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

s =	silt content of road surface material (%)	10
p =	number of days per year with precipitation >0.01 inch	157
M <sub>dry</sub> =		

		Number	Mean	Mean	Miles	Maximum	Maximum	Control	Control
Item	Description	of	Vehicle	Vehicle	per	Trips Per	Trips Per	Device	Efficiency
Number		wheels	Weight(tons)	Speed (mph)	Trip	Hour	Year	ID Number	%
1									
2	Rock Out 800,000	10	25	15	1	16	32,000	HR-WS	70
3	Endloader 800,000	4	20	5	0.01	20	40,000	HR-WS	70
4									
5									
6									
7									
- 8									

# 5. INDUSTRIAL PAYED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

ļ	sL=	road surface silt loading, (g/m^2)	70
	P≖	number of days per year with precipitation >0.01 inch	157

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1 2							
3							
4							
6							
7							
8							

# **EMISSIONS SUMMARY**

Name of applicant: Name of plant:

Hawkeye Contracting

Rock Crusher

# Particulate Matter or PM (for 45CSR14 Major Source Determination)

	Uncontro	lled PM	Controlled PM		
	lb/hr	TPY	lb/hr	TPY	
······································	FUGITIVE	EMISSIONS			
Stockpile Emissions	0.57	2.48	0.14	0.62	
Unpaved Haulroad Emissions	230.03	230.03	69.01	69.01	
Paved Haulroad Emissions	0.00	0.00	0.00	0.00	
Fugitive Emissions Total	230.60	232.51	69.15	69.63	
Equipment Emissions Transfer Point Emissions	12.88	12.88	2.58	2.58	
Transfer Point Emissions	0.07	0.07	0.04	0.04	
Point Source Emissions Total*	12.95	12.95	2.62	2.62	
Note: Point Source Total Controlled PM TPY emiss			2.62	2.62	
Facility Emissions Total	243.55	245.47	71.77	72.25	
*Facility Potential to Emit (P	TE) (Pacali	ne Emissions)	=	2	
	TET IDASEII	116 111822111121		1	

*Facility Potential to Emit (PTE) (Baseline Emissions)	=	2.62
(Based on Point Source Total controlled PM TPY emissions from above)	ENTER ON LINE 26 OF	APPLICATION

#### Particulate Matter under 10 microns, or PM-10 (for 45CSR30 Major Source Determination)

	Uncontro	lled PM-10	Controll	ed PM-10
	lb/hr	TPY	lb/hr	TPY
	FUGITIVE	EMISSIONS		
Stockpile Emissions	0.27	1.17	0.07	0.29
Unpaved Haulroad Emissions	48.39	48.39	14.52	14.52
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	48.66 POINT SOU	JRCE EMISSIONS	14.58	14.81
Equipment Emissions	6.13	6.13	1.23	1.23
Transfer Point Emissions	0.03	0.03	0.02	0.02
Point Source Emissions Total*	6.17	6.17	1.25	1.25
Note: Point Source Total Controlled PM-10 TPY e	emissions is used for 45CSF	30 Major Source determination		
Facility Emissions Total	54.83	55.73	15.83	16.06

# 1. Emissions From CRUSHING AND SCREENING

Page 1

1a. Primary Crushing

Primary		P	M		PM-10				
Crusher	Uncontrolled		Controlled		Uncontrolled		Controlled		
ID Number	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
CR-01	0.28	0.28	0.06	0.06	0.13	0.13	0.03	0.03	
00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
								miller.	
TOTAL	0.28	0.28	0.06	0.06	0.13	0.13	0.03	0.03	

1b. Secondary and Tertiary Crushing

Secondary		F	PM		PM-10				
& Tertiary	Unco	Uncontrolled		Controlled		Uncontrolled		rolled	
Crusher ID	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
				7.51.5					
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

1c. Screening

	L	F	M			PN	<i>I</i> I-10	
Screen	Uncontrolled		Cont	Controlled		Uncontrolled		rolled
ID Number	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
SS-01	12.60	12.60	2.52	2.52	6.00	6.00	1.20	1.20
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								EVH
TOTAL	12.60	12.60	2.52	2.52	6.00	6.00	1.20	1.20

Crushing		P	M		PM-10				
and	Uncon	controlled		Controlled		Uncontrolled		trolled	
Screening	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
TOTAL	12.88	12.88	2.58	2.58	6.13	6.13	1.23	1.23	

#### **EMISSION FACTORS**

source: AP42, Fifth Edition, Revised 01/95 (lb/ton of material throughput)

PM	
Primary Crushing	0.0007
Tertiary Crushing	0.00504
Screening	0.0315

PM-10	
Primary Crushing	0.000333
Tertiary Crushing	0.0024
Screening	0.015

# 2. Emissions From TRANSFER POINTS

Transfer		٢	M		PM-10					
Point	Unco	ntrolled	Cont	rolled	Uncor	ntrolled	Cont	rolled		
ID No.	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY		
		,								
TP-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TP-22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		

# 2. Emissions From TRANSFER POINTS (continued)

Transfer		PI	VI		PM-10				
Point	Unco	ntrolled	Controlled		Uncontrolled		Controlled		
ID No.	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
							•		
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	
TOTALS	0.07	0.07	0.04	0.04	0.03	0.03	0.02	0.02	

Source:

AP-42 Fifth Edition

13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

 $E = k*(0.0032) * [(U/5)^1.3]/[(M/2)^1.4] = pounds/ton$ 

Where:		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.0029	0.0014
U =	Mean Wind Speed (mph)		
M =	Material Moisture Content (%)		

#### Assumptions:

#### k - Particle size multiplier

For PM (< or equal to 30um) k = 0.0029For PM-10 (< or equal to 10um) k = 0.0014

For PM

 $E(M) = 1.437E-05 *[1/((M/2)^1.4)] = pounds/ton$ 

For PM-10

 $E(M) = 6.938E-06 *[1/((M/2)^1.4)] = pounds/ton$ 

For lb/hr

[lb/ton]\*[ton/hr] = [lb/hr]

For Tons/year

[lb/ton]\*[ton/yr]\*[ton/2000lb] = [ton/yr]

### 3. Emissions From WIND EROSION OF STOCKPILES

Stockpile		Р	М		PM-10				
ID No.	Unco	ntrolled	Cont	rolled	Uncontrolled		Controlled		
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
OS-01	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06	
OS-02	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06	
OS-03	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06	
OS-04	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06	
OS-05	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS	0.57	2.48	0.14	0.62	0.27	1.17	0.07	0.29	

Source:

Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

E = 1.7\*[s/1.5]\*[(365-p)/235]\*[f/15] = (lb/day/acre)

#### Where:

s =	silt content of material
p =	number of days with >0.01 inch of precipitation per year
f=	percentage of time that the unobstructed wind speed
	exceeds 12 mph at the mean pile height

For PM

E(s)= 1.3374941 \* s = lb/day/acre

For PM-10

E(s)=

0.6286222 \* s = lb/day/acre

For lb/hr

[lb/day/acre]\*[day/24hr]\*[base area of pile (acres)] = lb/hr

For Ton/yr

 $[lb/day/acre]^*[365day/yr]^*[Ton/2000lb]^*[base area of pile (acres)] = Ton/yr$ 

## 4. Emissions From UNPAVED HAULROADS

Item	PM				PM-10			
No.	Uncor	ntrolled	Contr	olled	Uncor	Uncontrolled		rolled
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
				7				
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	227.49	227.49	68.25	68.25	47.85	47.85	14.35	14.35
3	2.54	2.54	0.76	0.76	0.55	0.55	0.16	0.16
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	230.03	230.03	69.01	69.01	48.39	48.39	14.52	14.52

Source:

AP-42 9/98 Edition

13.2.2 Unpaved Roads

Emission Estimate For Unpaved Haulroads at Industrial Sites (equation 1)

 $E = [(k*(s/12)^a * (W/3)^b) / ((M_{dny}/0.2)^c)] * [(365-p)/365)] = lb / Vehicle Mile Traveled (VMT)$ 

#### Where:

		PM	PM-10
k =	particle size multiplier	10.00	2.60
a=	empirical constant	0.8	0.8
b =	empirical constant	0.5	0.4
c=	empirical constant	0.4	0.3
$M_{dry} =$	surface material moisture content (%) - dry conditions	0.2	
p=	number of days with at least 0.01 inches of precipitation	157	
s =	silt content of road surface material (%)	10	
W =	Mean vehicle weight (tons)		•

# 5. Emissions From INDUSTRIAL PAVED HAULROADS

Item	PM					PM-10			
No.	Unconf	trolled	Cont	rolled	Uncor	trolled	Controlled		
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	ib/hr	TPY	
ļ									
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Source:

AP-42 10/01 Edition

13.2.1 PAVED ROADS

Emission Estimate For Paved Haulroads

 $E = k * [sL/2]^0.65 * [W/3]^1.5 * [1 - (P/(2*N)]] = lb / Vehicle Mile Traveled (VMT)$ 

#### Where:

		PM	PM-10
k =	particle size multiplier	0.082	0.016
sL=	road surface silt loading, (g/m^2)	70	
P=	number of days per year with precipitation >0.01 inch	157	
N =	number of days in averaging period	365	
W =	average vehicle weight, (ton)		J

# AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Hawkeye Contracting Company, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Registration for a Rock Crushing and Screening Plant System to be located on Huff Creek Surface Mine, near Wharton in Boone County, West Virginia. The facility coordinates are as follows: latitude 37.804439 and longitude –81.608308.

The applicant estimates the potential to discharge the following Regulated Air Pollutants from the diesel combustion engine will be: criteria pollutants for the engine is estimated to be: NOx 3.441 tons per year, CO 0.741 tons per year, VOC 0.274 tons per year, SOx 0.228 tons per year and PM10 0.244 tons per year. The potential to emit hazardous pollutants from the engine is estimated to be: Benzene 0.000931 tons per year, Toluene 0.000408 tons per year, Xylene 0.000285 tons per year, Acetaldehyde 0.000766 tons per year, and Formaldehyde 0.001178 tons per year.

The applicant estimates the potential to discharge the following Regulated Air Pollutants associated with the operation of the crushing/screening plant will be: facility particulate matter potential to emit baseline emissions of 3 tons per year, particulate matter less than 10 microns emissions total of 1 tons per year and particulate matter facility emissions total of 72 tons per year.

Startup of operation is planned to begin upon permit approval. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the 25th day of January 2017

By: Hawkeye Contracting Company, LLC
Mark R. Rowe
Chief Operating Officer
PO Box 1200
Robinson Creek, KY 41560

## AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Hawkeye Contracting Company, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Registration for a Rock Crushing and Screening Plant System to be located on Panther Creek Surface Mine, near Eskdale in Kanawha County, West Virginia. The facility coordinates are as follows: latitude 38.059372 and longitude –81.484000.

The applicant estimates the potential to discharge the following Regulated Air Pollutants from the diesel combustion engine will be: criteria pollutants for the engine is estimated to be: NOx 3.441 tons per year, CO 0.741 tons per year, VOC 0.274 tons per year, SOx 0.228 tons per year and PM10 0.244 tons per year. The potential to emit hazardous pollutants from the engine is estimated to be: Benzene 0.000931 tons per year, Toluene 0.000408 tons per year, Xylene 0.000285 tons per year, Acetaldehyde 0.000766 tons per year, and Formaldehyde 0.001178 tons per year.

The applicant estimates the potential to discharge the following Regulated Air Pollutants associated with the operation of the crushing/screening plant will be: facility particulate matter potential to emit baseline emissions of 3 tons per year, particulate matter less than 10 microns emissions total of 1 tons per year and particulate matter facility emissions total of 72 tons per year.

Startup of operation is planned to begin upon permit approval. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the 25th day of January 2017

By: Hawkeye Contracting Company, LLC
Mark R. Rowe
Chief Operating Officer
PO Box 1200
Robinson Creek, KY 41560

# AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Hawkeye Contracting Company, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Registration for a Rock Crushing and Screening Plant System to be located on Guyan Surface Mine, near Amherstdale in Logan County, West Virginia. The facility coordinates are as follows: latitude 37.787153 and longitude –81.826167.

The applicant estimates the potential to discharge the following Regulated Air Pollutants from the diesel combustion engine will be: criteria pollutants for the engine is estimated to be: NOx 3.441 tons per year, CO 0.741 tons per year, VOC 0.274 tons per year, SOx 0.228 tons per year and PM10 0.244 tons per year. The potential to emit hazardous pollutants from the engine is estimated to be: Benzene 0.000931 tons per year, Toluene 0.000408 tons per year, Xylene 0.000285 tons per year, Acetaldehyde 0.000766 tons per year, and Formaldehyde 0.001178 tons per year.

The applicant estimates the potential to discharge the following Regulated Air Pollutants associated with the operation of the crushing/screening plant will be: facility particulate matter potential to emit baseline emissions of 3 tons per year, particulate matter less than 10 microns emissions total of 1 tons per year and particulate matter facility emissions total of 72 tons per year.

Startup of operation is planned to begin upon permit approval. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the 25th day of January 2017

By: Hawkeye Contracting Company, LLC
Mark R. Rowe
Chief Operating Officer
PO Box 1200
Robinson Creek, KY 41560

# ELECTRONIC SUBMITTAL DISK LOCATED IN ORIGINAL AND COPY

### SECTION IV. CERTIFICATION OF INFORMATION

This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant.

### FOR A CORPORATION (domestic or foreign)

G I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation

### **FOR A PARTNERSHIP**

G I certify that I am a General Partner

### FOR A LIMITED LIABILITY COMPANY

I certify that I am a General Partner or General Manager

### **FOR AN ASSOCIATION**

G I certify that I am the President or a member of the Board of Directors

### FOR A JOINT VENTURE

I certify that I am the President, General Partner or General Manager

### FOR A SOLE PROPRIETORSHIP

G I certify that I am the Owner and Proprietor

is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Chief of the Office of Air Quality immediately, and/or,

I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible

Signature MR Rove	01/16/17							
(please use blue ink) Responsible Official	Date							
Name & Title: MARK R. ROWE, COO please print or type)								
Signature								
(please use blue ink)  Authorized Representative (if applicable)	Date							
Applicant's Name: HAWKEYE CONTRACTING COMPANY LLC								
Phone: 606-509-3320								
Email: rrowe@jmpholdingsllc.com								

G

### SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

PLEASE CHECK ALL ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

Please See the appropriate reference document for an explanation of the attachments listed below.

ATTACHMENT A : CURRENT BUSINESS CERTIFICATE

ATTACHMENT B: PROCESS DESCRIPTION

ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS

ATTACHMENT D: PROCESS FLOW DIAGRAM

ATTACHMENT E: PLOT PLAN

ATTACHMENT F: AREA MAP

ATTACHMENT G: AFFECTED SOURCE SHEETS

ATTACHMENT H: BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET

ATTACHMENT I: EMISSIONS CALCULATIONS

ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT

ATTACHMENT K: ELECTRONIC SUBMITTAL DISKETTE

**CERTIFICATION OF INFORMATION** 

APPLICATION FEE

PLEASE MAIL AN ORIGINAL AND TWO COPIES OF THE COMPLETE GENERAL PERMIT REGISTRATION APPLICATION WITH THE SIGNATURE(S) TO THE DAQ PERMITTING SECTION AT THE ADDRESS SHOWN ON THE FRONT PAGE. PLEASE DO NOT FAX PERMIT APPLICATIONS. FOR QUESTIONS REGARDING APPLICATIONS OR WEST VIRGINIA AIR POLLUTION RULES AND REGULATIONS PLEASE CALL (304) 926-3727.

## ENGINE DATA SHEET

		GINE DA	ATA SHI				
Source Ide	ntification Number <sup>1</sup>		E1 .				
Engine Mar	nufacturer and Model	CatC4.4					
Manufactu	rer's Rated bhp/rpm	11	111/2200				
So	urce Status <sup>2</sup>		A/F				
	d/Modified/Removed						
	onth/Year) <sup>3</sup>	· · · · · · · · · · · · · · · · · · ·	2017				
Engine Manufactured/Reconstruction Date <sup>4</sup> Is this a Certified Stationary Spark Ignition		2	2015				-
Engine according (Yes or No) <sup>5</sup>	to 40CFR60 Subpart IIII?	7	YES				
Is this a Certified Engine according (Yes or No) <sup>6</sup>	Stationary Spark Ignition to 40CFR60 Subpart JJJJ?		No				
Engine Type		4 S	Stroke				
APCD Type <sup>8</sup>		N	J/A				
	Fuel Type <sup>9</sup>		iesel	-			
Engine, Fuel and H <sub>2</sub> S (gr/100 scf)		N	J/A				
Combustion Data	Operating bhp/rpm	111	/2200				
Data	BSFC (Btu/bhp-hr)	N	I/A				
Fuel throughput (ft³/hr)  Fuel throughput (MMft³/yr)		7.4	GPH				
		1480	0GPY	-			
	Operation (hrs/yr)	2000			· · · · · · · · · · · · · · · · · · ·		<u>-</u>
Reference <sup>10</sup>	Potential Emissions <sup>11</sup>	lbs/hr	tons/yr				
	NO <sub>X</sub>	3.4410	3.441				
	СО	0.7415	0.741				
	VOC	0.2742	0.274				
	SO <sub>2</sub>	0.2276	0.228				
	PM <sub>10</sub>	0.2442	0.244				
	Formaldehyde	0.00118	0.001178				
*							
			l			<u> </u>	

1. Enter the appropriate Source Identification Number for each reciprocating internal combustion compressor/generator engine located at the facility. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Emergency Generator engines should be designated EG-1, EG-2, EG-3 etc. If more than three (3) engines exist, please use additional sheets.

2.	Enter	the	Source	Status	using	the	follo	wing	codes:

NS Construction of New Source (installation)

ES Existing Source

	MS	Modification of Existing Source	RS	Removal of Source
2	Enter the	data (ar anticipated data) of the amain 2 :- 1-1	I-1*. /	

- 3. Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.
- 4. Enter the date that the engine was manufactured, modified or reconstructed.
- 5. Is the engine a certified stationary compression ignition internal combustion engine according to 40CFR60 Subpart IIII. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4210 as appropriate.

### Provide a manufacturer's data sheet for all engines being registered.

6. Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart JJJJ. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4243a(2)(i) through (iii), as appropriate.

### Provide a manufacturer's data sheet for all engines being registered.

7. Enter the Engine Type designation(s) using the following codes:

LB2S Lean Burn Two Stroke RB4S Rich Burn Four Stroke LB4S Lean Burn Four Stroke

8. Enter the Air Pollution Control Device (APCD) type designation(s) using the following codes:

A/F Air/Fuel Ratio IR Ignition Retard
HEIS High Energy Ignition System SIPC Screw-in Precombustion Chambers
PSC Prestratified Charge LEC Low Emission Combustion
NSCR Rich Burn & Non-Selective Catalytic Reduction

RICH Ignition Retard
SIPC Screw-in Precombustion Chambers
LEC Low Emission Combustion
SCR Lean Burn & Selective Catalytic Reduction

9. Enter the Fuel Type using the following codes:

PQ Pipeline Quality Natural Gas
2FO #2 Fuel Oil RG Raw Natural Gas
LPG Liquid Propane Gas

10. Enter the Potential Emissions Data Reference designation using the following codes. Attach all referenced data to this Compressor/Generator Data Sheet(s).

MD Manufacturer's Data AP AP-42
GR GRI-HAPCalc<sup>TM</sup> OT Other \_\_\_\_\_\_ (please list)

11. Enter each engine's Potential to Emit (PTE) for the listed regulated pollutants in pounds per hour and tons per year. PTE shall be calculated at manufacturer's rated brake horsepower and may reflect reduction efficiencies of listed Air Pollution Control Devices. Emergency generator engines may use 500 hours of operation when calculating PTE. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet*.

## STORAGE TANK DATA SHEET

Status <sup>2</sup>	Content <sup>3</sup>	Volume <sup>4</sup>	Dia <sup>5</sup>	Throughput <sup>6</sup>	Orientation <sup>7</sup>	Liquid Height <sup>8</sup>
Exist	Diesel	1,000	4	8,000	HORZ	
			<u> </u>			
					The same of the sa	Exist Diesel 1,000 4 8,000 HORZ

- 1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the facility. Tanks should be designated T01, T02, T03, etc.
- 2. Enter storage tank Status using the following:

EXIST Existing Equipment REM Equipment Removed

NEW Installation of New Equipment

- 3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
- Enter storage tank volume in gallons.
- 5. Enter storage tank diameter in feet.
- 6. Enter storage tank throughput in gallons per year.
- 7. Enter storage tank orientation using the following:

VERT Vertical Tank

HORZ Horizontal Tank

8. Enter storage tank average liquid height in feet.

EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS	Registration Number (Agency Use) G40-C	Potential Emissions (teacher)		302	0.02	67.1	0.29	Total 16.06	0.741 0.274 0.228 0.244	-			16.304
RITERIA			, ON	v C					3.441				2 4 4 4
ET FOR (			PM.	0.00	1.23	0.07	14.52	15.83	0.2442				16.0742
RY SHE		(Ibs/hr)	SO,					Total	0.2276				92220
SUMMA		Potential Emissions (Ibs/hr)	VOC	-					0.2742				0.2742
IISSION		Potenti	00						0.7415				0.7415
EN			NOx						3.441				3.441
			Source ID No.	Transfer Points	Crush/Screen	Stockpiles	Haulroads		CAT C4.4				

	<b>A</b>	MISSIO	N SUMIN	TARY SH	EET F	OR HAZ	EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS	S/TOXIC	POLLU	TANTS		
								Regist	Registration Number G G40-C	ber @ G40-0		
		Pc	tential Emi	Potential Emissions (lbs/hr)	r)			Pote	Potential Emissions (tons/yr)	ons (tons/yr)		
Source ID No.	Benzene	Acetaldeh	Toluene	Xylenes	n- Hexane	Formalde- hyde	Benzene	Acetaldehy	Toluene	Xvlenes	n- Hexa	Formalde-
Transfer Points												an fu
Crush/Scr een												
Stockpiles												
Haulroads												
CAT C9	0.00093	0.00077	0.00041	0.00028		0.00118	0.000931	0.000766	0.000408	0.000285		0.001178
TOTAL	HAPS 0.00378 lb/hr	378 lb/hr	0.003784 TPY	TPY								

## XA400S & XR400S



The Powerscreen® X400S range of high performance primary jaw crushing plants are designed for medium scale operators in quarrying, demolition, recycling and mining applications. The range includes the XA400S with hydraulic adjust and the XR400S with hydraulic release. User benefits include track mobility for a quick set-up time (typically under 30 minutes,) hydraulic crusher setting adjustment for total control of product size and crusher overload protection to prevent damage 5"= 250 TOW finished product (fires, 573, 8 5") by uncrushable objects.

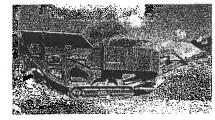
### Features & Benefits

- · High output and excellent reduction capability
- Heavy duty wear resistant hydraulic folding feed hopper with wedge fixing system
- Excellent under crusher access for removal of wire with hydraulic raise lower product conveyor
- Stepped self-cleaning grizzly feeder with under feeder screen option
- Deep fines chute to reduce material blockages
- Aggressive crushing action with high swing jaw encouraging material entry into crushing chamber
- Hydraulic crusher setting adjustment
- Improved manganese liner retention, protects jaw supports on both swing & fixed jaws
- Hydraulic crusher overload, ideal for applications with un-crushable material in feed, 200mm3 (XR400S)
- Economic to operate with low fuel consumption due to highly efficient direct drive system
- Angle adjustable product conveyor
- Easy access powerunit canopy
- PLC control system with auto start facility
- Remote control via umbilical
- Dust suppression system
- Easily set up

- Deflector plate under crusher
- Dirt conveyor
- Single pole/twin pole magnet
- Radio remote control
- Belt weigher
- Electric refuelling pump
- Hydraulically driven water pump
- Underscreen wire mesh: 10, 20, 30, 40 or 50mm
- Super tooth or multi tooth jaw plates
- Extended hopper

### Applications

- Sand & gravel
- Blasted rock
- River rock
- C & D waste
- Overburden
- Foundry waste
- Processed ores
- Processed minerals



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Output Potential: up to 400 toh (441 US toh)\*

Outhor Lorenner	, up to 400 tpm (441 80 tpm)
XA4005	TO PARAMETER SORT STATE OF
Weight (Est)	44,750kg (98,656lbs) including magnet & dirt conveyor
Transport width	2,8m(9/2°)
	4:3m ([本] 19 including diff conveyor.
Transport length	.15.2m (49°10")
Transport height	48.4m(11)29
Working width	2.8m (9°2°)

XR400S	<b>等的基本的基础等等等。第二人的基础</b>
Weight (Est)	44,750kg (98,656lbs).
Transport width	26m(92)
	4.3m (14.15) including dirt sonveyor.
Transport length	. 15.2m (49'10")
Transport height	GAM (13.21)
Working width	2.8m (9'2")



# Warior 1800

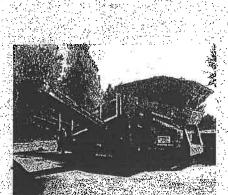
Designed for medium to large operators, where high capacity and throughput are paramount, the Powerscreen® Warrior 1800 is a tough, heavy duty machine built for screening, 2 or 3 way splitting and stockpilling in quarrying, recycling, construction and demolition aggregates and top soil applications.

With low ground pressure crawler tracks the Warrior 1800 is highly mobile. The versatile screen accepts a wide range of media options including bofor bars; finger screens, woven mesh and punch plates.

### Features & Benefits

- Heavy duty, incline belt feeder with hydraulic hopper sides
- Heavy duty, adjustable angle, grease Jubitcated 2 bearing, 2 dick screen box
- Jack up screen facility to aid mesh changes
- · Hydraulic "slide out facility" on oversize tall conveyor to ease mesh changes.
- Screen walkway and access steps
- Hydraulic folding conveyors with excellent stockpilling capacity.
- Engine protection shutdown system

- · Radio controlled tracking
- Oual power (additional electric hydraulic drive)
- Quick release screen wedge tensioning
- · Auto lubilication system
- Dust suppression
- · Wide range of screen media
- . 2 or 3 way split configuration
- # .High capacity incline apron feeder
- . Telescopic side conveyor option-

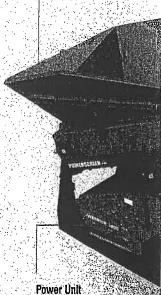


WARRIOR (800 (INCLINE BELT FEEDER)	3 WAY SPLIT
Weight (Est)	29,200Kg
Transport width	2.96m (9'8")
Transport length	15.38m (50'6")
Transport helght	.3,4m (11'2")
Working width	12.62m (41'5")
Working length	14,40m (47'5")
Working height	4.57m (14')

"Orange potential depends on application Engines are available that are certified to US EPA and EU off road diesel emission

### Hopper

Capacity: 6.8m3 (8.9yds3) Hydrautic folding wing plates Collapsible rear wall for direct feeding



Tier 3/Stage 3A; CAT C4.4 ATAAC 83kW (111,3hp) Tier 4i / Stage 3B: CAT.C4.4 4 ATAAC 82KW (2200rpm Fuel tank capacity: 336 L (88 US Gal)

### **Tracks**

Width: 400mm (15.7") 2 Speed tracking,

### Screen Media

- Mesh
- = Punch plate
- Bofor
- " Finger
- Ball deck
- \* Flex mat